## ABSTRACT OF THE DISCLOSURE

## METHOD, DATA PROCESSING SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR DETERMINING INVERSION EDGES FOR A CYCLIC COMPOUND DIRECTED GRAPH

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A method, computer program product, and a data processing system for determining an edge for inversion in a cyclic compound directed graph. A plurality of graph nodes of a graph are evaluated for generation of a first node order subset pair. A determination that the graph requires a recursive evaluation for completing node ordering of the plurality of graph nodes is made. The graph is divided into a plurality of graph partitions, and respective node order subset pairs are generated for the graph partitions.